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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO	
10/635,972	08/07/2003	Kerstin Willmann	P-4298.P1C1	1266	
26253 7	590 08/08/2006		EXAMINER		
DAVID W. HIGHET, VP AND CHIEF IP COUNSEL BECTON, DICKINSON AND COMPANY I BECTON DRIVE, MC 110 FRANKLIN LAKES, NJ 07417-1880			GABEL, GAILENE		
			ART UNIT	PAPER NUMBER	
			1641		
			DATE MAILED: 08/08/2000	DATE MAILED: 08/08/2006	

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)
	10/635,972	WILLMANN ET AL.
Office Action Summary	Examiner	Art Unit
•	Gailene R. Gabel	1641
The MAILING DATE of this communication app Period for Reply	ears on the cover sheet with the c	orrespondence address
A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING DA - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory period w - Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be time will apply and will expire SIX (6) MONTHS from a cause the application to become ABANDONE	N. nely filed the mailing date of this communication. D (35 U.S.C. § 133).
Status		
1) ☐ Responsive to communication(s) filed on <u>05 Jules</u> 2a) ☐ This action is FINAL . 2b) ☐ This allower closed in accordance with the practice under Experimental Experiments.	action is non-final. nce except for formal matters, pro-	
Disposition of Claims		
4) Claim(s) 17-32 is/are pending in the application 4a) Of the above claim(s) is/are withdray 5) Claim(s) is/are allowed. 6) Claim(s) 17-32 is/are rejected. 7) Claim(s) is/are objected to. 8) Claim(s) are subject to restriction and/or Application Papers	vn from consideration.	
9) ☐ The specification is objected to by the Examine 10) ☐ The drawing(s) filed on 09 November 2004 is/an Applicant may not request that any objection to the Replacement drawing sheet(s) including the correct 11) ☐ The oath or declaration is objected to by the Examine	re: a) accepted or b) object drawing(s) be held in abeyance. See ion is required if the drawing(s) is obj	e 37 CFR 1.85(a). jected to. See 37 CFR 1.121(d).
Priority under 35 U.S.C. § 119		
12) Acknowledgment is made of a claim for foreign a) All b) Some * c) None of: 1. Certified copies of the priority documents 2. Certified copies of the priority documents 3. Copies of the certified copies of the priority application from the International Bureau. * See the attached detailed Office action for a list	s have been received. s have been received in Applicati rity documents have been receive u (PCT Rule 17.2(a)).	on No ed in this National Stage
Attachment(s) 1) Notice of References Cited (PTO-892)	4) Interview Summary	(PTO-413)
 2) Notice of References Cited (1 10-032) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date <u>5/16/2005</u>. 	Paper No(s)/Mail Da	·

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DETAILED ACTION

Election/Restrictions

1. Applicant's election of Group I, claims 17 and 18, filed on July 5, 2006, is acknowledged and has been entered. Claims 1-16 have been cancelled. Claims 19-32 have been added. Accordingly, claims 17-32 are pending. Claims 17-32 are under examination.

Priority

2. An application in which the benefits of an earlier application are desired must contain a specific reference to the prior application in the first sentence of the specification or in an application data sheet (37 CFR 1.78(a)(2) and (a)(5)), including the current status, i.e. abandoned or US Patent Number, of the prior application. In this case, the current status of ASN 09/787,092, i.e. abandoned, has not been updated. Additionally, the reference to prior applications is incomplete and lacks continuity in failing to state that ASN 09/787,092 which was filed on March 12, 2001, is a 371 National Stage application of PCT/US99/21731 which was filed on September 21, 1999, and which is a CIP of 09/158,406 which was filed on September 22, 1998, now US Patent 6,495,333.

Specification

3. The disclosure is objected to because of the following informalities:

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The brief description of the drawings in the specification do not appear to coincide with the figures in the drawings which are designated by individual legends: Figure 2A to Figure 2J have not been individually and differentially described. Figure 3A to Figure 3I have not been individually and differentially described. Figure 4A to Figure 4K have not been individually and differentially described. Figure 6A to Figure 6C have not been individually and differentially described.

Appropriate correction is required.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 17-32 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 17 is ambiguous in being incomplete for omitting essential structural cooperative relationships of elements, such omission amounting to a gap between the necessary structural connections. See MPEP § 2172.01. Specifically, it is unclear what structural and functional cooperative relationship exists between each one of 1) the plurality of dendritic cell-distinguishing antibodies in step (b), 2) the at least one antibody specific for a dendritic cell surface marker in step (b), and 3) the at least one distinguishable DC subset in step (c). Step (c) recites "flow cytometrically assaying ... for the binding of the antibody specific for the dendritic cell surface activation marker",

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but fails to define the intended purpose for the plurality of dendritic cell-distinguishing antibodies recited in step (b).

- Step (c) also lacks clear antecedent basis in reciting, "by at least one distinguishable DC subset" since it is unclear how it relates or what role it plays in the claimed method for measuring dendritic cell function. Should the "at least one distinguishable DC subset" be identified or bound by antibodies specific thereto? However, no such antibody appears to be recited in the claim.
- A correlation step is also lacking because it is unclear how "assaying for binding ... by at least one distinguishable DC subset" provides a measure of dendritic cell function as required by the preamble.

Claim 30 lacks antecedent basis in reciting, "said dendritic cell subsetting antibody". It is further unclear what Applicant intends to encompass in reciting, "subsetting antibody." It is especially unclear how the dendritic cell function is measured by at least one distinguishable dendritic cell subset. See also claims 31 and 32.

Double Patenting

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir.

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1985); In re Van Ornum, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); In re Vogel, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and In re Thorington, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

5. Claims 17 and 18 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 22 and 23 of U.S. Patent No. 6,495,333. Although the conflicting claims are not identical, they are not patentably distinct from each other because both methods recite a flow cytometric method for measuring dendritic cell function by 1) contacting the whole blood sample with a dendritic cell activator; 2) further contacting the activated cells with a cocktail of antibodies that bind dendritic cells to isolate the dendritic cells from other cells, antibodies that bind a subset portion of the dendritic cells, and at least one antibody that binds a dendritic cell surface marker indicative of activation, i.e. cytokine; then 3) flow cytometrically measuring binding of the at least one activation specific antibody to the dendritic cell surface marker in the dendritic cell that also is concurrently bound to the subsetting antibody; wherein the measure of the complex formed in step 4) provides a measure of dendritic cell function.

US Patent 6,495,333 is silent in reciting that the cytokine bound by the at least one cytokine specific antibody is a dendritic cell surface marker indicative of activation.

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However, US Patent 6,495,333 provides that the cytokine antigen that is indicative of activation is any one of CD25, CD40, CD80, CD86, HLA-DR, and HLA-DQ (claim 23 of US Patent 6,495,333) which are the dendritic cell surface markers indicative of activation, that are recited by the instant application in claim 18.

6. Claims 17 and 19-32 are rejected on the ground of nonstatutory double patenting over claims 1 and 5-18 of U. S. Patent No. 6,495,333 since the claims, if allowed, would improperly extend the "right to exclude" already granted in the patent.

The subject matter claimed in the instant application is fully disclosed in the patent and is covered by the patent since the patent and the application are claiming common subject matter, as follows: in this case, the dendritic cell activators including lipopolysacchararide (LPS), phorbol 12-myristate 13 acetate plus ionomycin (PMA-I), and CD40-crosslinker recited in claims 19-22, the plurality of dendritic cell-distinguishing antibodies which are collectively specific for CD3, CD4, CD14, CD16, CD19, CD20, CD56, and HLA-DR labeled with FITC as identical fluorophore recited in claims 23-29, the dendritic cell subsetting antibodies such as CD11c and CD123 recited in claims 30-32, are disclosed throughout the specification of US Patent 6,495,333, as applied to both cell surface binding (see column 7, lines 32-51) and intracellular binding of cytokine specific antibodies in measuring dendritic cell function, and also recited in claims 1 and 5-18 of US Patent 6,495,333, as applied to intracellular binding of cytokine specific antibodies in measuring dendritic cell function.

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Accordingly, there is no apparent reason why applicant was prevented from presenting claims corresponding to those of the instant application during prosecution of the application which matured into a patent. See *In re Schneller*, 397 F.2d 350, 158 USPQ 210 (CCPA 1968). See also MPEP § 804.

- 7. No claims are allowed.
- 8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gailene R. Gabel whose telephone number is (571) 272-0820. The examiner can normally be reached on Monday, Tuesday, and Thursday, 7:00 AM to 4:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Long V. Le can be reached on (571) 272-0823. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Gailene R. Gabel Patent Examiner Art Unit 1641 August 2, 2006